DOCUMENT RESUME

ED 064 384 TM 001 629

AUTHOR Stafford, Richard E.; Browne, William F.
TITLE Construct Validity of Creativity.
PUB DATE Apr 72
NOTE 3p.; Paper read at the AERA Convention (Chicago, Ill., April 1972); Based on part of a thesis submitted for M.A. Degree at Ohio State Univ)

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS College Students; Correlation; *Creativity; *Factor Analysis; Intelligence Level; Item Analysis; *Measurement Instruments; Response Mode; Sex Differences; Testing; *Test Validity
IDENTIFIERS HAIQ; *Hobby Accomplishment Information Questionnaire

ABSTRACT

During the past decade both the Guilford and Torrence groups have developed numerable measures to assess creative potential. Many of these measures purport to evaluate "creativity" but one element seems to be lacking in each: i.e., the last of "reality-based, real world measures" which would allow relevant response tendencies to emerge. To meet this need the Hobby-Accomplishment Information Questionnaire (HAIQ) was designed. The HAIQ, based on a layman's concept of creativity, consists of 70 items; of these, 29 were selected as having internal consistency as well as a positive correlation with the total score. The HAIQ was administered to 166 male and female college students along with measures of convergent thinking. A four factor solution was chosen to illustrate the factorial structure: I convergent thinking, II originality production, III creative fluency, and IV drive. It is concluded that psychologists and educators should become aware of the probability that intelligence and creativity are independent. (Author/CK)

ED 064384

Paper read at AERA, Chicago, April, 1972

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Construct Validity of Creativity[1]

Richard E. Stafford
SUNY at Oneonta

and

William F. Browne
Ohio State University

TM 001 629

Objectives of Inquiry

"In all of the creativity testing movement there is much discussion of validity, and test batteries themselves are so much in flux that no single set of measures can be said to have captured the field" (Barron, 1969). During the past decade both the Guilford and Torrence groups have developed enumerable measures to assess creative potential. Many of these measures purport to evaluate "creativity" but one element seems to be lacking in each: i.e., the last of "reality-based, real world measures" which would allow relevant response tendencies to emerge. To meet this need the Hobby-Accomplishment Information Questionnaire (HAIQ) was designed

Method and Technique

The HAIQ, based on a layman's concept of creativity such as musical composition and fiction writing, consists of seventy items with questions such as "Is one of your hobbies sculpturing?" Thirty-seven items were judged by a panel to be the most characteristic of creativity. These were then item analyzed and from them 29 items were selected as having internal consistency as well as a positive correlation with the total score. The final score for the HAIQ was based on these 29 items.

[1]Based on part of a thesis submitted for his Master of Arts Degree by William F. Browne.

The HAIQ was administered to 166 male and female college students along with measures of convergent thinking: Identical Blocks, Quick Word Test and Cattell Culture Fair Test; divergent production: Ideaphoria, Cognitive Complexity, and the Torrence Measures; perceptual speed: Visual Motor Velocity; and reaction time. Means and standard deviations were computed for each variable. Sex differences were evaluated by the "t" test. All variables were intercorrelated and factor analyzed by a principal components method and rotated by Varimax to an orthogonal solution.

Results and Conclusions

Significant sex differences were found for four variables among which was the HAIQ. A four factor solution based on size of eigen values and cumulative variance was chosen to illustrate the factorial structure. Measures with a loading of $\pm$.30 or more were considered in naming the factors.

Admittedly the interpretation of any rotated factor matrix is subjective but the following names seemed most appropriate: I convergent thinking, II originality production, III creative fluency, and IV drive. Negligible loadings of the creativity variables on I, indicate independence of intelligence and creativity. However, variables purporting to measure creativity did load on two factors rather than one. This may explain some of the confusion and contradictions in present studies of creativity. Three of Torrence's measures, flexibility, originality, and elaboration appear to control Factor II; while both a verbal and non-verbal measure of fluency have the highest loading on III. Since the HAIQ had the third highest loading on factor III it seemed appropriate to interpret the layman's concept of creativity as largely based on fluency.

Factor IV is a motivation or drive factor closely parallelling Wallach and Kogan's "low creativity-high intelligence group" that is described as addicted to school and who constantly strive for excellence.

Educational and Scientific Importance of the Study

Psychologists and educators should become aware of the probability that intelligence and creativity are independent (at least for some groups). They should also be aware of the complex composition of creativity. For example, questions reflecting the layman's concept of creativity do not appear to correlate with originality as defined by Torrence tests but more with sheer fluency, thus giving this aspect of creativity construct validity.